

media transport mechanism control signal, for moving said plurality of data storage media in each respective data storage media storage location along at least first and second axes, said first axis orthogonal to said second axis, and for providing a predetermined one of said plurality of data storage media stored in a preselected one of said plurality of data storage media storage locations to a retrieval region in said data storage media storage cabinet;

- a data storage media retrieval mechanism, responsive to a retrieval mechanism control signal directing movement of said data storage media retrieval mechanism along at least one axis parallel to at least one of a row and a column of said data storage media storage cabinet proximate said retrieval region in said data storage media storage cabinet, for retrieving a predetermined one data storage media of said plurality of data storage media, and for placing said retrieved predetermined one data storage media into a media read/write mechanism; and
- a data storage media system controller, responsive to commands requesting access to a predetermined one of said plurality of data storage media, for providing said media transport mechanism control signal directing said movement of said data storage media transport mechanism, for providing said retrieval mechanism control signal directing retrieval of said predetermined one data storage media.

2. The system of claim 1, wherein said data storage media storage cabinet includes a plurality of rows of data storage media, each row including a plurality of data storage media storage locations.

3. The system of claim 2, wherein each row of said plurality of rows includes at least one empty data storage media storage location not including a data storage media.

4. The system of claim 1, wherein said data storage media include tapes.

5. The system of claim 1, wherein said data storage media include disks.

6. The system of claim 5, wherein said disks include optical disks.

7. The system of claim 1, wherein said retrieval mechanism moves vertically along one vertical axis.

8. The system of claim 1, wherein said data storage media system controller includes a data storage media index, for maintaining data storage media positional information.

9. The system of claim 8, wherein said data storage media system controller includes processor means, responsive to said commands and to said data storage media index, for computing a series of media transport mechanism control signals for most rapidly positioning said predetermined one data storage media proximate said retrieval region of said data storage media storage cabinet.

10. The system of claim 9 wherein said commands are received from a coupled data processing system.

11. The system of claim 10 wherein said data processing device includes a host computer.

12. The system of claim 1 wherein each of said data storage media include encoded indicia proximate an exterior region of said data storage media.

13. The system of claim 12 wherein said encoded indicia includes a bar code.

14. The system of claim 12 wherein said retrieval mechanism includes an encoded indicia reader, for reading said encoded indicia from said exterior region of said data storage media.

15. The system of claim 14 wherein said data storage media system controller is responsive to a decoded indicia

signal received from said encoded indicia reader, for at least updating said data storage media index.

16. The system of claim 15 wherein said data storage media system controller is responsive to said decoded indicia signal received from said encoded indicia reader for building said data storage media index.

17. A system for storing and retrieving data storage media, said system comprising:

- a data storage media storage cabinet including a plurality of rows, each row including at least one data storage media, and a plurality of data storage media storage locations for containing data storage media, at least one of said plurality of data storage media storage locations not including data storage media;

- at least one data storage media transport mechanism, coupled to each of said plurality of data storage media storage locations, and responsive to a data storage media transport mechanism control signal, for moving said at least one data storage media in each respective data storage media storage location along at least first and second axes in each row, said first axis orthogonal to said second axis, and for providing a predetermined one of said plurality of data storage media stored in a preselected one of said plurality of data storage media storage locations to a retrieval region in each row in said data storage media storage cabinet;

- a data storage media retrieval mechanism, responsive to a retrieval mechanism control signal directing movement of said data storage media retrieval mechanism along one vertical axis proximate said retrieval region in each row in said data storage media storage cabinet, for retrieving a predetermined one data storage media of said plurality of data storage media, and for placing said retrieved predetermined one data storage media into a media read/write mechanism; and

- a data storage media system controller, responsive to commands requesting access to a predetermined one of said plurality of data storage media, for providing said media transport mechanism control signal directing said movement of said data storage media transport mechanism, for providing said retrieval mechanism control signal directing retrieval of said predetermined one data storage media.

18. The system of claim 17 wherein said data storage media is selected from the group consisting of tapes, magnetic disks and optical disks.

19. The system of claim 17 wherein each of said data storage media include encoded indicia proximate an exterior region of said data storage media; and

- said data storage media retrieval mechanism includes an encoded indicia reader, for readings said encoded indicia from said exterior region of said data storage media.

20. A system for storing and retrieving data storage media, said data storage media including encoded indicia proximate an exterior region of said data storage media, said system comprising:

- a data storage media storage cabinet including a plurality of data storage media storage locations, at least one of said plurality of data storage media storage locations not including a data storage media;

- at least one data storage media transport mechanism, coupled to each of said plurality of data storage media storage locations, and responsive to a data storage media transport mechanism control signal, for moving said plurality of data storage media in each respective data storage media storage location along at least first